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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MURPHY, TIMOTHY M

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 07/09/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/526,600

Applicant(s)

NEWBERRY ET AL. *EB*

Examiner

Timothy Murphy

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5.6</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 8 objected to because of the following informalities:

Claim 8, lines 10-11 "in response predetermined" should state "in response **to** predetermined."

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. The term "relatively remotely broadcast" in claim 14 is a relative term which renders the claim indefinite. The term "relatively remotely broadcast" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

The examiner interprets claim 14 such that "locally broadcast" as a localized regional broadcast, such as a terrestrial broadcaster or local cable head-end, and interprets "relatively remotely broadcast" as a national provider, such as a national broadcast network on a national service provider, such as a DBS service.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1 and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by Byrne et al (5,990,883).

In regard to Claim 1, Byrne discloses in a video decoder (Fig. 2, 20), a method for acquiring a program (user selects an entry to receive the corresponding signal and content source from the provides sources (satellite 38, internet 36, terrestrial 40); col. 5, lines 6-25) conveyed on more than one broadcast channel (Fig. 3, the program "Two is Plenty" is on two channels), comprising the steps of:

generating a program guide display listing programs being broadcast on a plurality of broadcast channels during specified broadcast time segments (as seen in Fig. 3), wherein said program guide display lists a particular program on both a first and a second broadcast channel (Fig. 3, the program "Two is Plenty" is on NBC 5 (first broadcast channel) and NBC 2 (second)); and

acquiring said particular program from said first broadcast channel in response to user selection of either of said first and second broadcast channels (user selects an

entry (i.e., Two is Plenty on NBC 5 (first broadcast channel) in Fig. 3) to acquire the appropriate channel (NBC 5) for the selected program; col. 5, lines 6-25).

In regards to Claim 4, Byrne discloses a method according to claim 1, wherein said user selection of either of said first and second broadcast channels is performed via selection of a displayed item in said program guide display (acquire the appropriate channel for the selected program from the program guide; Fig. 3 and col. 5, lines 6-10 and 18-38).

6. Claims 8 –12 and 15-19 rejected under 35 U.S.C. 102(e) as being anticipated by Tsukidate et al (6,414,720).

In regard to Claim 8, Tsukidate discloses a method for substituting a program conveyed on a first broadcast channel (Fig. 7, Ch1) for a program conveyed on a second broadcast channel (Ch4; col. 3, lines 25-37 and col. 5, lines 49-58), comprising the steps of:

acquiring a first channel map associating a first transmission channel carrier frequency with data identifiers (Fig. 3, channel map information 335 and associated PSI data 330 for Chj) used to capture datastreams constituting a first program conveyed on a first broadcast channel (program P1-2 of Ch1);

acquiring a second channel map associating a second transmission channel carrier frequency (Ch4) with data identifiers (channel map information 335 and associated PSI data 330 for Ch4) used to capture datastreams constituting an alternative program (col. 3, lines 25-37 and substitution program, col. 5, lines 49-58) conveyed on a second broadcast channel (substitution program for time period from 8:35 to 8:50 from Ch1 to Ch4; col. 5, lines 49-58) ; and

substituting said alternative program for said first program in response **to** predetermined criteria (substitution as determined by the broadcast center 1 of Fig. 1) by using second channel map information to initiate acquisition of said second broadcast channel and said alternative program (substitution program by using CMI 335 and associated PSI data 330 that indicates a mapping change from Ch1 to Ch4 for the substitution program at a time from 8:35 to 8:50; col. 5, lines 49-58 and col. 6, line 57 – col. 7, line 2).

In regard to Claim 9, Tsukidate discloses a method according to claim 8, wherein said first channel map contains information for use in acquiring programs conveyed on a first set of broadcast channels (channel map information for Chj used to create the necessary programs found on channels Ch1 – ChM (Figs. 6 & 7); col. 3, lines 25-37 and col. 5, lines 49-58), and

said second channel map contains information for use in acquiring an alternative program conveyed on an alternative broadcast channel corresponding to one of said channels in said first set of broadcast channels (using CMI 335 indicating that program

P1-2 is mapped to from CH1 to CH4 for a substitution program for a time period from 8:30 to 8:50; Fig. 7 and col. 5, lines 49-58).

In regard to Claim 10, Tsukidate discloses a method according to claim 8, including the step of examining said acquired second channel map for alternative program data being conveyed on an alternative broadcast channel in response to a channel change command (user selecting (channel change command) program P1-2 during the time period of 8:35 to 8:50 results in Ch1 being mapped to Ch4 using the CMI provided for the substitution program; col. 5, lines 49-58 and col. 6, line 57 – col. 7, line 2).

In regard to Claim 11, Tsukidate discloses a method according to claim 10 including the steps of automatically substituting an alternative program (Fig. 7, substitution program from 8:30 to 8:50) and alternative broadcast channel (Ch4) identified as being available for a User selected channel by said acquired second channel map (using CMI for substitution program; col. 5, lines 49-58), and

tuning to receive said alternative program and alternative broadcast channel in response to a channel change command (user selecting (channel change command) program P1-2 during the time period of 8:35 to 8:50 results in Ch1 being mapped to Ch4 using the CMI provided for the substitution program; col. 5, lines 49-58 and col. 6, line 57 – col. 7, line 2).

In regard to Claim 12, Tsukidate discloses a method according to claim 8, wherein said predetermined criteria comprises a channel map priority (the priority of the CMI which results in the substitution program from 8:35 to 8:50).

In regard to Claim 15, Tsukidate discloses a method according to claim 8, wherein said predetermined criteria comprises a command derived from a remote head-end (the CMI is provided by the broadcasting center 1 (remote head-end) which results in the substitution program from 8:35 to 8:50).

In regard to Claim 16, Tsukidate discloses a method according to claim 8, including the step of re-tuning to acquire said first program (after completion of substitution program at 8:50, re-tunes to Ch1 for remainder of first program P1-2, as indicated in Fig. 7).

In regard to Claim 17, Tsukidate discloses a method for substituting a program conveyed on a first broadcast channel for a program conveyed on a second broadcast channel (Figs. 6 & 7, col. 3, lines 25-37 and col. 5, lines 49-58), comprising the steps of:

acquiring a first channel map (Fig. 3, channel mapping information 335)
associating a first transmission channel carrier frequency with data identifiers used to capture datastreams constituting a first program conveyed on a first broadcast channel (program P1-2 of Ch1);

acquiring a second channel map associating a second transmission channel carrier frequency with data identifiers used to capture datastreams (CMI 335 and associated PSI data 330) constituting an alternative program conveyed on a second broadcast channel (i.e., using CMI for substitution program for a time period from 8:35 to 8:50 on Ch4; col. 5, lines 49-58); and

automatically substituting an alternative program and alternative broadcast channel identified as being available for a User selected channel by said acquired second channel map (col. 3, lines 25-37 and col. 5, lines 49-58).

In regard to Claim 18, Tsukidate discloses a method according to claim 17, wherein said second channel map and said first channel map are allocated a predetermined channel map priority (the priority of the CMI which results in the substitution program from 8:35 to 8:50 from Ch1 to Ch4, as seen in Fig. 7).

In regard to Claim 19, Tsukidate discloses a method according to claim 17, wherein said second channel map is hierarchically associated with said first channel map in a database of program specific information (the PSI data fields 330 include channel mapping information 335 for mapping one channel to another channel (hierarchical); col. 3, lines 36-37).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Byrne et al (5,990,883), in view of Okzan et al (6,115,074).

In regard to Claim 2, Byrne discloses a method according to claim 1.

However, Byrne fails to acquire a program using packet identification and channel tuning information conveyed in one of a plurality of channel maps associating a transmission channel frequency with data identifiers used to capture datastreams constituting said program, as claimed.

In an analogous art, Okzan teaches acquiring a program (user selects desired program utilizing a program guide; col. 3, lines 30-35) using packet identification (PID; col. 5, lines 39-41) and channel tuning information (CIT; col. 5, line 40) conveyed in one of a plurality of channel maps (CIT channel map (Fig. 3) is one of the plurality of maps in master guide table (MGT; col. 5, lines 39-41)) associating a transmission channel frequency (processor 60, col. 5, lines 55-61) with data identifiers used to capture

datastreams constituting said program. This enables the receiver to appropriately identify and tune to the channel selected by the user (col. 3, lines 30-35 and col. 5, lines 55-61).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Byrne with acquiring a program using packet identification and channel tuning information conveyed in one of a plurality of channel maps associating a transmission channel frequency with data identifiers used to capture datastreams constituting said program, as taught by Okzan, for the benefit of enabling the receiver to appropriately identify and tune to the channel selected by the user.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Byrne et al (5,990,883), in view of Okzan et al (6,115,074), in further view of Tsukidate et al (6,141,720).

In regard to Claim 3, the combined systems of Byrne and Okzan disclose a method according to claim 2.

However, they fail to provide said plurality of channel maps that are allocated a predetermined priority, as claimed.

In an analogous art, Tsukidate teaches providing channel maps that are allocated in a predetermined priority (priority of substitution program from Ch1 to Ch4 as determined by the channel mapping information, as indicated Fig. 7 and col. 5, lines 49-58). This provides ability for the broadcaster to provide a substitution program available on a separate channel as if the substitution program is actually on the first channel (col. 3, lines 29-32 and col. 6, lines 63 – col. 7, line 6).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined systems of Byrne and Okzan with providing channel maps that are allocated in a predetermined priority, as taught by Tsukidate, for the benefit of providing the ability for the broadcaster to provide a substitution program available on a separate channel as if the substitution program is actually on the first channel.

9. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Byrne et al (5,990,883), in further view of Tsukidate et al (6,141,720).

In regard to Claim 5, Byrne discloses a method according to claim 1.

However, Byrne fails to include the step of selecting one of said first and second broadcast channels in accordance with predetermined criteria comprising at least one

of, (a) channel map priority, and (b) a User program preference profile, (c) a substitution profile downloaded from a remote head-end and (d) geographic region preference information, as claimed.

In an analogous art, Tsukidate teaches acquiring a particular program from a broadcast channel using a channel map (Fig. 3, CMI 335) selected in accordance with a predetermined priority (the priority of the CMI which results in the substitution program from 8:35 to 8:50, as seen in Fig. 7 and col. 5, lines 49-59). This enables the broadcaster to direct a program selection from one channel to another channel as if the user were experiencing one continuous virtual channel despite the change to another physical channel (as indicated in col. 3, lines 29-32).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Byrne with selecting one of said first and second broadcast channels in accordance with predetermined criteria comprising at a channel map priority, as taught by Tsukidate for the benefit of enabling the broadcaster to direct a program selection from one channel to another channel as if the user were experiencing one continuous virtual channel despite the change to another physical channel.

In regard to Claim 6, Byrne discloses a method according to claim 1.

However, Byrne fails to include the step of acquiring said particular program from said first broadcast channel using a channel map selected in accordance with a predetermined priority, as claimed.

In an analogous art, Tsukidate teaches acquiring a particular program from a broadcast channel using a channel map (Fig. 3, CMI 335) selected in accordance with a predetermined priority (the priority of the CMI which results in the substitution program from 8:35 to 8:50, as seen in Fig. 7 and col. 5, lines 49-59). This enables the broadcaster to direct a program selection from one channel to another channel as if the user were experiencing one continuous virtual channel despite the change to another physical channel (as indicated in col. 3, lines 29-32).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Byrne with acquiring a particular program from a broadcast channel using a channel map selected in accordance with a predetermined priority, as taught by Tsukidate for the benefit of enabling the broadcaster to direct a program selection from one channel to another channel, according to the priority the broadcaster desires, as if the user were experiencing one continuous virtual channel despite the change to another physical channel.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Byrne et al (5,990,883), in view of Tsukidate et al (6,141,720), in further view of Okzan et al (6,115,074).

In regard to Claim 7, the combined systems of Byrne and Tsukidate disclose a method according to claim 6.

Although Tsukidate discloses the controller sending a code specifying the TS (col. 6, lines 60-61) and a code specifying the channel to the tuner (col. 6, lines 61-62) conveyed in a channel map (CMI 335) to the tuner in response to a selection by the user (col. 6, lines 57-62), they fail to provide said channel map associating a transmission channel carrier frequency with data identifiers used to capture datastreams constituting said particular program conveyed on said first broadcast channel, as claimed.

In an analogous art, Okzan teaches acquiring a program (user selects desired program utilizing a program guide; col. 3, lines 30-35) using packet identification (PID; col. 5, lines 39-41) and channel tuning information (CIT; col. 5, line 40) conveyed in one of a plurality of channel maps (CIT channel map (Fig. 3) is one of the plurality of maps in master guide table (MGT; col. 5, lines 39-41)) associating a transmission channel frequency (processor 60, col. 5, lines 55-61) with data identifiers used to capture datastreams constituting said program. This enables the receiver to appropriately

identify and tune to the channel selected by the user (col. 3, lines 30-35 and col. 5, lines 55-61).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined systems of Byrne and Tsukidate with acquiring a program using packet identification and channel tuning information conveyed in one of a plurality of channel maps associating a transmission channel frequency with data identifiers used to capture datastreams constituting said program, as taught by Okzan, for the benefit of enabling the receiver to appropriately identify and tune to the channel selected by the user.

11. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukidate et al (6,414,720), in view of Eyer et al (6,160,545).

In regard to Claim 14, Tsukidate discloses a method according to claim 8.

However, Tsukidate fails to provide a locally broadcast alternative program substituted for a relatively remotely broadcast first program, as claimed.

In an analogous art, Eyer teaches providing a locally broadcast alternative program substituted for a relatively remotely broadcast first program (channel maps

indicate that the CATV channel programs (locally broadcast alternative) are the preferred source over the satellite channel programs; col. 7, lines 21-40), such that the local programming and commercials are viewed by the user (col. 7, lines 24-27).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Tsukidate with providing a locally broadcast alternative program substituted for a relatively remotely broadcast first program, as taught by Eyer, for the benefit of providing, upon program substitution, programming and commercials that are geographically local to the user.

12. Claims 13 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukidate et al (6,414,720), in view of Un et al (6,040,850).

In regard to Claim 13, Tsukidate discloses a method according to claim 8.

Although Tsukidate discloses of substituting an alternative program based predetermined criteria (the criteria to substitute the program from 8:30 to 8:50), Tsukidate fails to provide said predetermined criteria comprising geographic region information, as claimed.

In an analogous art, Un teaches providing predetermined criteria based on

geographic information (tables are created for each time zone (geographic information) mapped by the corresponding descriptor 24A; col. 4, lines 19-38). This provides the benefit of creating channel mapping tables that are specific to particular geographic regions that are detectable by the receiver.

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Tsukidate with providing predetermined criteria based on geographic information, as taught by Nu, for the benefit of creating channel mapping tables that are specific to particular geographic regions that are detectable by the receiver for program substitution.

In regard to Claim 20, Tsukidate discloses a method according to claim 17.

However, Tsukidate fails to associate a channel map with an event via an indicator conveyed in event description information, as claimed.

In an analogous art, Un teaches associating a channel map with an event via an indicator (Fig. 2, EIT constructor description 24A) conveyed in the event description information (separately transmits event information tables for each time zone and uses the descriptor 24A at the receiver for a particular time zone; col. 4, lines 19-38). This

provides the benefit of providing indicators for events within a standardized channel mapping system for various digital broadcasting systems.

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Tsukidate with associating a channel map with an event via an indicator conveyed in event description information, as taught by Un, for the benefit of providing indicators for events within a standardized channel mapping system for various digital broadcasting systems for program substitution.

In regard to Claim 21, the combined systems of Tsukidate and Un disclose a method according to claim 20, wherein said indicator is a normally unused indicator (Un: indicator 24A in NIT table 24 for each time zone (col. 4, lines 19-38), which is not an indicator normally used when events are not available).

In regard to Claim 22, the combined systems of Tsukidate and Un disclose a method according to claim 20, wherein said indicator is conveyed in language information (Un: in NIT table 24) and said event description information is an Event Information Table (EIT), (Un: indicator 24A maps to EIT; col. 4, lines 19-38).

Conclusion

Art Unit: 2611

13. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

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P.O. Box 1450
Alexandria, VA 22313-1450

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I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. (703) _____ - _____ on _____
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Signature: _____

Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.


14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Murphy whose telephone number is (703) 305-8144. The examiner can normally be reached on Monday through Thursday 8am – 5pm, and alternating Fridays 8am – 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the senior examiner, Chris Grant can be reached on (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Timothy M. Murphy
Patent Examiner
Art Unit 2611

tmm



VIVEK SRIVASTAVA
PRIMARY EXAMINER